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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,510	01/26/2001	Tomohiro Nakajima	202462US2	6109
22850	7590	03/26/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PAIK, STEVE S	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/769,510

Applicant(s)

NAKAJIMA ET AL.

Examiner

Steven S. Paik

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-25 and 65-70 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 75-77 is/are rejected.
- 7) ☒ Claim(s) 2,4,26-64 and 71-74 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's response to the Election of Species Requirement file March 10, 2003 has been fully considered. The request for reconsideration of the Election of Species Requirement of the last Office action is persuasive and, therefore, the Election of Species Requirement is withdrawn. This Office Action includes examination of all of claims 1-77.

Claim Objections

2. Claims 7 and 17 are objected to because of the following informalities: claims 7 and 17 recite a phrase, "a fifth reflection unit" in line 2. There is no recitation of a first, a third, or a fourth reflection unit in any other claims in this application. Claims 8 and 18 recite a "second reflection unit" in line 2. Accordingly, it would be more definite and precise to amend the phrase with -- a first reflection unit --. Appropriate correction is required.

3. Claims 26-28, 36, 37, 39-41, 49, 52-54, and 71-77 are objected to because of the following informalities:

Claim 26: "k units" in line 7 on page 123 needs to be defined more precisely. For example, k is a positive integer as recited in previous claims. Furthermore, the word, "that" in line 9 on the same page appears to be vague and indefinite. The examiner respectfully suggests changing it with -- the optical scan module --. Appropriate correction is required.

Claims 27, 28, 40, 41, 53 and 54: "so that their respective relative positions" in lines 16 and 23 on pages 123 and 127 and lines 18 and 24 on page 131, respectively would more precisely recite the claim if the phrase is amended by -- respective relative positions of said optical scan modules --.

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Claims 36, 37 and 49: "so that" in line 25 on pages 125, 129 and in line 8 on page 126 would be more appropriate and definite by replacing it with --, and --.

Claim 39: "k units" in line 7 on page 127 needs to be defined more precisely. For example, k is a positive integer as recited in previous claims. Furthermore, the word, "that" in line 9 on the same page appears to be vague and indefinite. The examiner respectfully suggests changing it with -- the optical scan module -- . Appropriate correction is required.

Claim 52: "k units" in line 9 on page 131 needs to be defined more precisely. For example, k is a positive integer as recited in previous claims. Appropriate correction is required.

Claims 72-77: "k units" in line 18 on pages 137, in line 16 on pages 138, 139 and 140, and in line 14 on page 141 and 142, respectively need to be defined more precisely. For example, k is a positive integer as recited in previous claims. Appropriate correction is required.

4. Claim 71 is objected to because of the following informalities: claim 71 recites a phrase, "k-th optical scan module" in line 15 on pages 136. The examiner respectfully suggests to further define what k is. For example k is a positive integer as recited in previous claims. Furthermore, the word, "that" in wherein clause of claims 72-44 appear to be vague and indefinite. The examiner respectfully suggests changing it with -- the optical scan module -- . Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 75-77 recite the limitation "the optical writing unit" in line 1 on pages 140, 141 and line 24 on page 141. The examiner believes the applicants intend to recite the scanner unit.

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If that is what the applicant intends to claim, an appropriate correction is required to fix the issue of lacking sufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamioka (US 6,330,020).

Re claim 1, Kamioka discloses an optical scanning system comprising a single integral solid body (within the housing 12) with a function for deflecting a light beam from a light emission source (1a or 1b) by a deflection unit (deflector 7) to repeat scanning, wherein the optical scan module has an arrangement in which the light emission source (1a or 1b), the deflection unit (deflector 7), and terminals connected to a drive circuit (driving circuits (15a and 15b) for driving the plurality of light sources independently.) for light emission source or a drive circuit for the deflection unit are integrally fixed to a holder (see Fig. 1), the holder is formed with an abutment portion to be brought into abutment with another member when mounted to other member, and the terminals constitute a mounting unit for mounting the holder to other member (The terminals that provides electrical contacts to each of light emission source and a deflector are connected with the abutment of the holder – a board or the like that mounts all of the units disclosed in figure 1 – to the housing 12.).

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Re claim 3, Kimoka discloses the optical scanning system as recited in rejected claim 1 stated above, wherein the holder is applied with at least one of the light emission source (1a or 1b) and the drive circuit (15a or 15b) for the light emission source.

Allowable Subject Matter

9. Claims 5-25 and 65-70 are allowed.

10. Claims 26, 39, 52 and 71 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

11. Claims 2, 4, 27-38, 40-51, 53-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record, teaches or fairly suggests the claimed optical scan module comprising, among other things, a holder provided with electrodes for electrical wiring to a light emission source and a deflection unit and configured for holding a movable portion of the deflection unit, and a sealing substrate provided together with the holder in a piled relationship, and the light emission source and the movable portion of the deflection unit are enveloped to be tight-closed between the holder and the sealing structure. The optical scan module further comprises a plurality of units that are fixed on a circuit substrate which is constituted as the other member and identical to the optical scan module formed with the light emission source and the deflection unit.

Conclusion


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohkawa et al. (US 6,469,294) disclose an optical scanner comprising a light source, a light beam splitter, a polygon mirror, and groups of mirrors; Krichever et al. (US 5,151,581) disclose an optical scanner in which one scan pattern is selected among a plurality of scan patterns to read an indicia.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Steven S. Paik
Examiner
Art Unit 2876

ssp